

# **Site Description**

Location: • About one square mile in Southern Albuquerque.

Population: • Approximately 70,000 people in Albuquerque are served by the San Jose water supply system.

• A residential district of 590 people lies adjacent to the north of the General Electric facility.

Setting: • Nearest residence is within the site boundaries.

• Municipal wells San Jose (SJ)-3 and SJ-6 were decommissioned in 1981 due to contamination with low levels of organic solvents. These wells were plugged and abandoned in September 1994. A new city water supply well (Burton #4) was completed in April 1987.

Hydrology:

- The western portion of the site is generally underlaid by three aquifers- the recent floodplain alluvium or shallow, perched aquifer, the intermediate aquifer, and the undivided Santa Fe Formation, or deep aquifer. In the eastern portion of the site, the perched aquifer is absent. Bajada deposits lie at the surface to the east where only two water-bearing formations are present.
- The flood plain alluvium and the intermediate zone are separated by a silty clay zone of up to 20 feet in thickness. In some areas, this clay zone is absent because subsequent channeling has cut through the clay.
- The intermediate zone is separated from the undivided Santa Fe Formation by a change in grain size from sandy gravel to sand. This change in grain size acts as a semipermeable barrier for downward migration of contaminants.
- The two decommissioned on-site wells, as well as other off site municipal water supply wells, are screened in the undivided Santa Fe Formation.

## **Present Status and Issues**

• The PRPs are implementing the required remedial actions at the Site. The PRPs will be installing another deep well near the source area to monitor for DNAPLs in the deep aquifer in early August 2004.

## **Wastes and Volumes**

- 1. Principal Pollutants:
  - Halocarbons (1,1-dichloroethene, trichloroethene, 1,1 dichloroethane, tetrachloroethane) and Aromatics (benzene, ethylbenzene, toluene xylene) are found in shallow ground water.
  - Low level Halocarbons and high level Aromatics are present in the upper 60-feet of the intermediate ground water.
  - Halocarbons are found in the upper part of the deep zone.
- 2. Volume:
  - Approximately 5,000 cubic yds. of solvent-contaminated soil on various Potentially Responsible Party (PRP) properties.
  - Petroleum spills on or near the Duke City, Texaco, Chevron USA, ATA Pipeline, and Whitfield properties and in close proximity to other petroleum pipelines.
  - Contaminated ground water, volume unknown.

# Site Assessment and Ranking -

### NPL LISTING HISTORY

Site HRS Score: 42.24 Proposed Date: 7/23/82 Final Date: 9/08/83 NPL Update: Original NPL

SIGNIFICANT COMMENTS RECEIVED: Suggestions were presented by several operators within the Site that the size of the Site should be decreased and that the NPL listing be reviewed for a site listing that is, in reality, only a broad geographic area. The Agency believes that as ground water flows under a variety of conditions, the site should not be redefined. Furthermore, designation of a site on the NPL is for information purposes and does not imply that a facility on the site is responsible for the releases. Several releases of hazardous substances from various operators contaminated a portion of the intermediate aquifer.

## The Remediation Process -

Site History:

- Industrial development in the South Valley area began in the 1950s with the construction of a metal parts manufacturing plant by the Atomic Energy Commission. By the 1960s, organic chemicals (solvents) were being handled in the area. Presently, petroleum fuels and various other organic chemicals are stored and handled within the Site boundaries.
- A drum storage at the northwest corner of the AF Plant 83/GE site leaked volatile, organic chlorinated (VOC) solvents into the soil.
- EPA graded and backfilled the excavated areas.
- Chlorinated solvent contamination of ground water resulted in the shut-down of twenty private and two municipal water supply wells.
- EPA completed the initial Remedial Investigation/Feasibility Study phase in 1988 along with the

installation of a new replacement City Water Supply well in 1987.

- Edmunds Street: UNIVAR sponsored the investigation. The investigation was divided into two parts: on-site soils and ground water contaminant plume.
  - On site Revised Plan for the second phase Remedial Investigation (RI) received in November 1987. Field work was completed in August 1988. Report received in February 1989 showed no significant soil contamination remaining.
  - Plume Installation of monitoring wells to locate area and concentration of contaminant plume completed. Public meeting on ground water ROD was held May 26, 1988. Consent Decree was negotiated. Signature by PRPs in 8/89. Public comment ended May 11, 1990. The Consent Decree became effective June 1, 1990. Plume extraction and treatment system in place and operational on 9/90.
- Former Air Force Plant 83 (GE): Field work on a second phase of Remedial Investigation has been completed. Public meeting was held September 1, 1988. ROD signed 9/30/88. A Unilateral Administrative Order for performance of design and construction issued 7/89 to GE. GE responded, agreeing to perform the work in August 1989 and is complying with the Order. GE performed the Remedial Design/ Remedial Action (RD/RA). Treatment systems in shallow and deep aquifers are operational.
- The Underground Storage Tank program for NMED and the NMED Ground Water Protection Bureau, Technical Section, have conducted investigations at five of the hydrocarbon properties (Chevron, Texaco, ATA Pipeline, Duke Cities Distributing and Whitfield Tank Lines) to determine the sources of floating and dissolved hydrocarbons in the ground water at the site.
- A Unilateral Order was issued to Chevron and ATA Pipeline in October 1991 to control the petroleum contamination up-gradient of Edmund Street to keep it from interfering with the Edmunds Street Remediation.
- The NMED Ground Water Quality Bureau negotiated cleanup orders with Chevron, ATA Pipeline, and Texaco in 1994 to remediate the shallow aquifer and the upper 60-feet of the intermediate aquifer. Soil vapor extraction, free product recovery, and dissolved phase, ground water recovery systems are operating.
- EPA completed the five-year review in September 2000. The results of the five-year review indicate that the remedies have been, and are expected to continue to be, protective of human health and the environment.
- Two additional ground water monitoring wells were installed in layer 7 in March 2002, to further evaluate the deeper ground water characteristics.

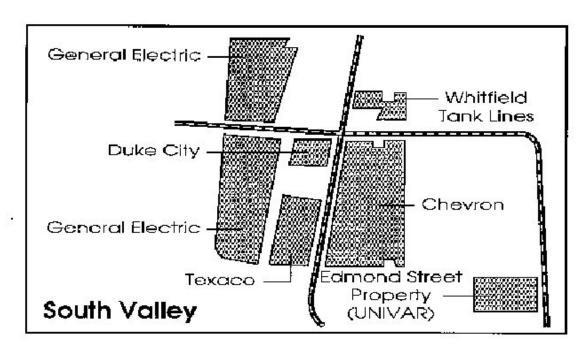
#### • POTENTIAL HEALTH RISKS:

- Wells in the San Jose well field area were contaminated with VOC compounds, forcing the closing of over twenty private wells and two Albuquerque municipal wells.
- Results of the Remedial Investigation and Endangerment Assessment show that in the off-site areas there was not a significant threat to public health or the environment.

#### • OTHER ENVIRONMENTAL RISKS:

- Contamination in the soil and shallow ground water was found in the residential area north of the GE Plant. Soil contamination, found 9-feet below the surface, presents no threat to human health and was dismissed as a potential remedial target.
- The shallow ground water is being remediated.
- The deep aquifer has been contaminated with chlorinated solvents. The design of the system establishes a hydraulic barrier between the contaminant plume and the nearest City water supply well, 3/4 mile to the east. The intermediate aquifer is contaminated by petroleum hydrocarbons releases from Texaco, Chevron, ATA Pipeline, and Duke City Distributing. Both zones are being remediated.

# Site Map and Diagram -



# Record of Decision -

Operable Unit 1.

DATE SIGNED:

March 22, 1985.

REMEDY:

Replace city water supply wells, San Jose #3 & #6.

STATUS:

Burton #4 (replacement) well was completed in April 1987.

Operable Unit 2.

DATE SIGNED:

September 30, 1988.

REMEDY:

• Plug SJ #3 & #6 wells plus any private wells that might be a conduit from shallow to intermediate aquifers.

• Ground water monitoring and access restrictions are required.

STATUS:

Work completed in September 1994.

Operable Units 3 & 4.

DATE SIGNED:

June 1988 (Van Waters & Rogers, i.e. Univar).

REMEDY:

Ground Water Remediation- OU#3 - Pump and treat ground water.

**STATUS** 

Pump and treat system operational since 4/92.

Source Identification/Source Control- OU#4 - No further action.

Operable Units 5 & 6.

DATE SIGNED: REMEDY: STATUS:

September 30, 1988 (Air Force Plant 83/General Electric.).

#5 - Pump and treat shallow ground water; soil cleanup, if needed.

- Pump and treat system operational since 5/94 for shallow ground water.
- No action on soil. If the shallow aquifer is de-watered, which now seems unlikely, soil borings will be taken to determine the residual contaminant levels in the soil. If the shallow zone is remediated without de-watering, the potential residual soil contamination will not represent a threat and will not be treated.

REMEDY: #6 - Pump and treat deep ground water aquifer. STATUS:

- Remedial Design was completed in May 1995.
- Construction began on remediation system in July 1995.
- Construction completed on recovery system and treatment plant.
- Remedial operations began on April 25, 1996.

# **Community Involvement**

- Community Involvement Plan: Developed 01/84
- Open houses and workshops: 9/88, 11/93, 7/95, 10/97, 9/98, 11/99, 10/00, 11/01
- Original Proposed Plan Fact Sheet and Public Meeting: 5/88, 7/88, 8/88, 2/89
- Original ROD Fact Sheet: 7/88, 11/88, 4/89
- Milestone Fact Sheets: 5/89, 3/90, 4/90, 6/90, 3/91, 11/93, 6/95, 4/96.
- Citizens on site mailing list: 255
- Constituency Interest: Organized community effort, Spanish translators needed.
- Congressional following: Moderate to High interest.
- Environmental Justice issues have been voiced at this particular site. The community is represented on the President's Council of Environmental Justice.
- An open house was held on November 19, 1999, to discuss the current status of the Site. U.S. Congresswoman Heather Wilson and U.S. Congressman Mike Oxley attended the meeting.
- A public meeting was held on October 19, 2000, to discuss the five-year review and the current status of the Site.
- A public meeting was held on November 5, 2001, with the community to discuss the current status of the Site.
- Site Repository: Zimmerman Library, Government Information Department, University of New Mexico, Albuquerque, NM 87131-1466, (505) 277-8960. Complete site documents are also available at the New Mexico Environment Department (NMED) Superfund Oversight Section in Santa Fe and EPA Region 6 in Dallas.

# **Technical Assistance Grant**

- Availability Notice: 01/89
- Letters of Intent Received on 1/12/89 from San Jose Area Community Awareness Council; notice period 1/26 - 2/26/89
- Final Application Received: 11/13/89
- Grant Award: 01/01/90, changed to 03/01/90
- Budget Period: 03/01/90-02/28/93
- Grantee: San Jose Area Community Awareness Council

Dolores Herrera, Executive Director

Albuquerque, NM

• Current Status: Completed TAG work; all money awarded, grant closed out 10/12/94.

### Contacts

- Remedial Project Manager (EPA): Terry Roundtree, 214/665-6518, Mail Sta. 6SF-LT
- State Contact: Susan Morris, NMED (505) 827-2890
- Community Involvement (EPA): Terry Roundtree, 214/665-6518, Mail Sta. 6SF-LT
- Attorney (EPA): Joseph Compton, 214/665-8506, Mail Sta. 6RC-S
- State Coordinator (EPA): Kathy Ketcher, 214/665-7196, Mail Sta. 6SF-LT
- Ombudsman (EPA): Arnold Ondarza, 1-800-533-3508
- Prime Contractor: N/A

## **Benefits**

- The water supply for 70,000 customers of the San Jose City water supply system is being protected.
- 5,000 cubic yards of solvent-contaminated soil has been remediated.
- Through the removal of contaminated oil, soil, and debris, the installation of a new water supply well, and the ongoing treatment of remaining contaminated soil, the EPA has reduced possible hazardous exposures at the South Valley site while ground water extraction and treatments are continuing.
- Both shallow and deep aquifers are being remediated.
- It should be noted that the groundwater remedial systems at the South Valley Superfund Site have been very effective in recovering and treating over 2.3 billion gallons of water since the remedial systems went on-line. Almost the entire amount of this large volume of water has been returned to the aquifer from which it was extracted, allowing the groundwater to be returned back to its beneficial use.